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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,194	01/18/2002	Steven N. Tischer	36968-262337	9687
23552	7590	04/26/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			BRINEY III, WALTER F	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/051,194	TISCHER, STEVEN N.	
	Examiner	Art Unit	
	Walter F Briney III	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 22 February 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 19-23, 41-45, 63-68 and 70-78 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 19-21, 23, 41-43, 45, 63-65, 67, 68 and 70-78 is/are rejected.
- 7) Claim(s) 22, 44 and 66 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 19-21, 23, and 70-72 are rejected under 35 U.S.C. 102(e) as being anticipated by Shanahan (US Patent 6,496,692).**

Claim 19 is limited to a *user-programmable audio alert system*. Shanahan discloses a method and apparatus for programming user-defined information into an electronic device. See Abstract. In particular, Shanahan allows multiple types of user-defined audio files, i.e. *audio alerts*, to be stored within a portable electronic device. See column 3, lines 25-33. The files are retrieved in response to a programmable event, which inherently suggests a *plurality of data structures, each data structure...programmed by a user to detect ...one of a plurality of distinct audio alert triggering events and relate...the triggering event[s]...to one of the plurality of audio alerts*. The user programmed event and retrieval also must be inherently stored in a device *having storage*. As seen in figure 7, the portable device includes a loudspeaker (540) for reproducing stored audio files, i.e. *an emitter*. The disclosure of column 3, lines 25-33, clearly suggest emitting an audio alert upon the occurrence of any one of a plurality of predetermined events. Some concrete examples of this are incoming call

reception and the passage of a predetermined time. See column 7, line 60 through column 8, line 5. Therefore, Shanahan anticipates all limitations of the claim.

Claim 20 is limited to *the system of claim 19*, as covered by Shanahan. One example of a portable wireless device envisioned within the disclosure of Shanahan is a *wireless telephone*. See column 3, lines 6-15. Therefore, Shanahan anticipates all limitations of the claim.

Claim 21 is limited to *the system of claim 19*, as covered by Shanahan. Shanahan discloses transmitting signature files, which comprise audio information to a called party, such that upon reception of the signature file, the emitter of the called party reproduces the audio information of the signature file. See column 7, lines 36-59. Shanahan further discloses a method for transmitting said signature file as seen in figure 10, steps 150-167. The file is transmitted, and inherently stored and reproduced at the receiving device, i.e. *wherein the device is programmable to transmit the plurality of audio alerts to another device having storage for storing data and an emitter for emitting the plurality of audio alerts*. Also see column 11, lines 43-57. Therefore, Shanahan anticipates all limitations of the claim.

Claim 23 is limited to *the system of claim 19*, as covered by Shanahan. Shanahan discloses that the audio files, i.e. *audio alerts*, are digitally stored in a plurality of formats, see column 3, lines 51-53. Each digital format must inherently be converted from its stored digital representation into an analog signal for reproduction by the emitter, wherein digital-to-analog conversion corresponds to *modulation*. It follows that each *triggering event* has an *external variable*, such as the passage of time or the

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desire to make a phone call, and the conversion, i.e. *modulation*, occurs dependent on the state of this *variable*. Therefore, Shanahan anticipates all limitations of the claim.

Claim 70 is limited to *the system of claim 19*, as covered by Shanahan.

Shanahan discloses storing audio alerts in MIDI format, i.e. *wherein at least one of the plurality of audio alerts comprises a sequence of numbers and wherein each number further comprises a distinct musical tone*. Therefore, Shanahan anticipates all limitations of the claim.

Claim 71 is limited to *the system of claim 19*, as covered by Shanahan.

Shanahan discloses editing alerts using the programmer, which resides in a *personal computer* (figure 4A and figure 4B, elements 90, 95). See column 5, line 54 through column 7, line 35. Therefore, Shanahan anticipates all limitations of the claim.

Claim 72 is limited to *the system of claim 19*, as covered by Shanahan.

Shanahan discloses embedding the programmer, depicted in figure 7, which performs editing features, into the device. The device is cellular telephone (column 1, line 43 through column 2, line 20) programmed using a *keypad*. Therefore, Shanahan anticipates all limitations of the claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. **Claims 41-43, 45, 63-65 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan.**

Claims 41-43 and 45 are limited to essentially the same subject matter as claims 19-21 and 23, respectively, as covered by Shanahan. However, claims 41-43 and 45 recite a *plurality of lists* instead of a *plurality of data structures* as in claims 19-21 and 23. In fact, Shanahan does not specifically recite how the associations between audio alert triggering events and audio alerts are stored in memory.

However, the examiner takes Official Notice of the fact that *arrays* were well-known data structures at the time of the invention. Data structures are used to simplify the organization of data in a computer, especially when programming with object-oriented languages. Any number of elements, or in this case, audio alerts, can be accessed and modified with ease with high-level function calls.

It would have been obvious to one of ordinary skill in the art at the time of the invention to organize the digitally-stored audio alerts into an *array* to take advantage of their ease of use in programming.

Claims 63-65 and 67 are limited to essentially the same subject matter as claims 19-21 and 23, respectively, as covered by Shanahan. However, claims 63-65 and 67 recite a *plurality of lists* instead of a *plurality of data structures* as in claims 19-21 and 23. In fact, Shanahan does not specifically recite how the associations between audio alert triggering events and audio alerts are stored in memory.

However, the examiner takes Official Notice of the fact that *lists* were well-known data structures at the time of the invention. Data structures are used to simplify the

organization of data in a computer, especially when programming with object-oriented languages. Any number of elements, or in this case, audio alerts, can be accessed and modified with ease with high-level function calls.

It would have been obvious to one of ordinary skill in the art at the time of the invention to organize the digitally-stored audio alerts into a *list* to take advantage of their ease of use in programming.

3. **Claim 74 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Skorko (US Patent 6,560,466).**

Claim 74 is limited to *the system of claim 23*, as covered by Shanahan. Shanahan discloses providing user-defined alert tones, but does not modify their behavior in response to relative distance. Therefore, Shanahan makes obvious all limitations of the claim with the exception *wherein the external variable comprises relative distance information.*

Skorko teaches modulating the volume of a ring tone (i.e. alert tone) based on the distance of a body from the phone to prevent scaring users when they are close to the phone and receive a request for a ring tone (column 1, lines 25-63).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include the volume modulating apparatus as taught by Skorko into the cellular phone of Shanahan for the purpose of not scaring someone that is close to a ringing telephone.

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4. **Claim 76 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Mulla et al. (US Patent 6,311,896).**

Claim 76 is limited to *the system of claim 23*, as covered by Shanahan.

Shanahan discloses providing audio alerts, in particular, when an incoming call is detected, but suggests that other user programmable events are detected. See column 3, lines 37-40. Therefore, Shanahan makes obvious all limitations of the claim with the exception *wherein the external variable comprises retail information*.

Mulla teaches integrating a bar code scanner into a cellular telephone (column 12, lines 14-18) to provide a way for consumers to shop or prepare their shopping lists (column 9, lines 61-65). The scanner provides an audio indication of the success of scanning activities (i.e. *retail information*) (column 9, lines 23-45) (table 1). The act of scanning a properly formatted barcode corresponds to an *audio alert triggering event* and whether the barcode is of proper format corresponds to the *external variable*, which causes analog-to-digital conversion, i.e. *modulation*, of a stored *audio alert*. It would have been obvious to one of ordinary skill in the art at the time of the invention to integrate the bar code scanner as taught by Mulla into the cellular telephone of Shanahan for the purpose of allowing consumers to shop or prepare their shopping lists with the device.

When integrated with the system of Shanahan, the audio indication provided by the scanner is personalized in the spirit of the invention of Shanahan.

It would have been obvious to use a user created audio alert as taught by Shanahan to personalize the audio alert generated by the scanner of Mulla simply for the purpose of allowing full customization of a portable electronic device.

5. **Claims 77 and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Mulla and further in view of Lemelson et al. (US Patent 5,945,656).**

Claim 77 is limited to *the system of claim 77*, as covered by Shanahan in view of Mulla. Mulla teaches providing product and other information to a consumer from a merchant, however, Mulla discloses no details as to how to alert and display this information to the consumer. Therefore, Shanahan in view of Mulla makes obvious all limitations of the claim with the exception *wherein an audio alert is modulated according to product information.*

Lemelson teaches generating audio-based product information with respect to a scanned bar code to prevent false scanning of unrelated bar codes (column 7, lines 20-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the audio alert system of Mulla to transduce scanned bar codes into readily understandable audio alerts that relate to product information for the purpose of insuring that a scanned bar code relates to a particular item.

Claim 78 is limited to *the system of claim 78*, as covered by Shanahan in view of Mulla. Mulla teaches providing price and other information to a consumer from a merchant, however, Mulla discloses no details as to how to alert and display this information to the consumer. Therefore, Shanahan in view of Mulla makes obvious all limitations of the claim with the exception *wherein an audio alert is modulated according to price information.*

Lemelson teaches generating audio-based price information with respect to a scanned bar code to prevent false scanning of unrelated bar codes (column 7, lines 20-36).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the audio alert system of Mulla to transduce scanned bar codes into readily understandable audio alerts that relate to product information for the purpose of insuring that a scanned bar code relates to a particular item.

6. Claims 73 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Kennedy, III et al. (US Patent 6,535,743).

Claim 73 is limited to *the system of claim 23*, as covered by Shanahan. Shanahan discloses providing audio alerts, in particular, when an incoming call is detected and suggests that other user programmable events are detected, however, Shanahan does not include way to vary audio signals based on GPS information. Therefore, Shanahan makes obvious all limitations of the claim with the exception *wherein the external variable comprises global positioning information.*

Kennedy teaches implementing a GPS tracking unit into a cellular telephone so that customized audio alerting directions may be downloaded and played to a user in case they are lost (column 2, line 58-column 3, line 6). The reception of directions at step (634) of figure 13B corresponds to an *audio alert triggering event*, the location of the cellular telephone as determined by GPS clearly corresponds to the *global positioning information*, and content of directions corresponds to *user created audio alerts* whose content is modulated by the GPS information.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the GPS tracking and direction system as taught by Kennedy into the cellular telephone of Shanahan for the purpose of providing directions to a user if they become lost.

Claim 75 is limited to *the system of claim 23*, as covered by Shanahan. Shanahan discloses providing audio alerts, in particular, when an incoming call is detected and suggests that other user programmable events are detected, however, Shanahan does not include way to vary audio signals based on directional information. Therefore, Shanahan makes obvious all limitations of the claim with the exception *wherein the external variable comprises directional information.*

Kennedy teaches implementing a GPS tracking unit into a cellular telephone so that customized audio alerting *directions* may be downloaded and played to a user in case they are lost (column 2, line 58-column 3, line 6). The reception of directions at step (634) of figure 13B corresponds to an *audio alert triggering event*, the location of the cellular telephone as determined by GPS clearly corresponds to the *directional information*, and content of directions corresponds to *user created audio alerts* whose content is modulated by the GPS information.

It would have been obvious to one of ordinary skill in the art at the time of the invention to implement the GPS tracking and direction system as taught by Kennedy into the cellular telephone of Shanahan for the purpose of providing directions to a user if they become lost.

7. **Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shanahan in view of Kaizu et al. (US Patent Application Publication 2004/0015989).**

Claim 68 is limited to *the system of claim 19*, as covered by Shanahan. Clearly, Shanahan discloses a portable electronic device, e.g. a wireless telephone, which is responsive to a plurality of *audio alert triggering events* programmed by a user. See column 3, lines 37-40. One example given is the reception of an incoming call, i.e. a *ringing signal*. However, Shanahan simply does not disclose the reception of an *electronic mail message*.

The examiner takes Official Notice of the fact that receiving e-mail at a wireless telephone was well known at the time of the invention. E-mail has been established as a convenient method of communication between remote users. It is quick and allows any amount of electronic information to be shared between people, such as music or video files as well as text messages. It is also well known to associate sounds with incoming emails. Evidence of this is provided by the disclosure of Kaizu, who allows a user to associate a ringtone with the URL of an e-mail sender. See paragraphs 201-205.

It would have been obvious to one of ordinary skill in the art at the time of the invention to include an e-mail system as was known in the prior art and allowing a user to establish a ringtone associated with the e-mail sender's URL as was also known in the art and as evidenced by Kaizu for the purpose of enabling e-mail communications for the advantageous reasons stated above and for uniquely identifying the sender of each e-mail in the spirit of unique caller identification through associated ringtones.

Allowable Subject Matter

The following is a statement of reasons for the indication of allowable subject matter:

8. **Claims 22, 44 and 66 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

Claim 22 is limited to *the system of claim 21*, as covered by Shanahan. While Shanahan discloses programming the portable electronic device to respond to a plurality of different *audio alert triggering events*, inherently generating a plurality of associated *data structures*, there is no suggestion that those data structures are transferable to another device. While it is quite possible that the memory of one device can be physically swapped with the memory of another device, this does not constitute the device as being programmable to do so. Thus, claim 22 is allowable over Shanahan.

Claims 44 and 66 are limited to essentially the same subject matter as claim 22, and are allowable over Shanahan for at least the same reasons.

Response to Arguments

Applicant's arguments, filed 22 February 2005, with respect to claims 19-23, 41-45, 63-68 and 70-78 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter F Briney III whose telephone number is 571-272-7513. The examiner can normally be reached on M-F 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WFB
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SUPERVISORY PATENT EXAMINER